



Financing sesame production and marketing: the number one priority

During the formulation of the SBN Support Programme in 2012, intensive dialogue with different stakeholders quickly made clear that the financing of sesame production and marketing was among the top challenges of the sesame sector in northwest Ethiopia. And it still is the number one challenge for improving farmers' income and national foreign currency earnings. The sesame sector is marked by a plethora of credit providers who all play their role in their own specific way. Farmers strongly rely on informal moneylenders, who provide credit at a very high cost. They are however inevitable because formal credit suppliers are not able to provide the required funds. It is estimated that the formal credit system, which now represents about 1.1 billion birr, requires an additional capitalisation of 400 million birr (around 19 million euro) to be able to replace the informal credit system. The effects of this could be spectacular: **(i)** Farmers' input credit cost reduction with 50%. These current field investments deliver non-optimal yields (four quintals per hectare and less). Farmers complain that the costs for conventional practices are going up but yields are going down. Application of improved agricultural practices on all the sesame fields would require 6 billion birr (276 million euro) and could deliver double yields or more (can go up to 12 quintals per hectare). Availing affordable input credit could lead to **(ii)** agricultural innovation resulting in productivity improvement (50% yield increase would raise the national sesame revenues with 4 billion birr per year). Insufficient access to output credit hampers commercial activities of cooperatives and unions and explains why the largest part of the sesame trade is dominated by local spot market traders, who, at the input side, are among the most important informal moneylenders. For accessing formal (input and output) credit, higher levels of internal capitalisation are required at farmer, cooperative and union level, as well as credit risk mitigation measures and financial system innovation (improved mutual understanding of farmers and financial institutions, use of ICT, innovative forms of collateral). This could then result in **(iii)** improved presence of cooperatives and unions at the marketing side.

Production and credit cost study

In 2014, the SBN Support Programme has conducted an in-depth production and credit cost study in seven *woredas* in North Gondar and Western Tigray. A total of 476 farmers were interviewed on their production and credit costs incurred in the 2013 production season. The study allowed to **(i)** have an overall picture of production costs, of which credit costs are an important element; **(ii)** identify the formal and informal sources of credit supply to farmers; **(iii)** analyse farmers' credit demand (amounts needed for different operations and moments when credit is in greatest demand) **(iv)** establish the interest rates of different forms of credit and **(v)** identify options for improving and innovating the sesame sector finance system.

Financing the agricultural season

In the current extensive sesame-based farming system, most producers take up credit to pay the labourers who are working on the field. The most important moments in the agricultural season are, in order of importance: **(i)** first weeding (2nd – 3rd week of July); **(ii)** second weeding (2nd week of August), **(iii)** harvesting (1st – 2nd week of October); **(iv)** first ploughing (June) and **(v)** land cleaning (March-May). Going from Quara to Kafta Humera, there are evidently some minor differences per region with regards to the moment of credit need.

Financing sesame-based farming: a complex landscape

In the financial sector landscape around the sesame producing areas, a striking variety of formal and informal sources of credit co-exist. Formal credit providers include banks, microfinance institutions (MFIs), primary cooperatives (PCs), and saving and credit cooperatives (SACCOs). The informal credit sources can be informal moneylenders (IMLs) (*incl. spot market traders*), relatives, friends or others like *equeb*. In the current situation, all of them play an important role to make sesame production happen.

Henok cultivates seven hectares of land, of which four hectares are devoted to sesame. Early in the season, Henok spent 5,000 birr to prepare the land for sesame cultivation. Being a member, he is able to borrow 2,000 birr from his primary cooperative. This allows him to pay the labourers who work on his farm during weeding time. After nine months, he has to pay back this loan with 400 birr interest. The primary cooperative interest rate is 20%. For the high costs of production, Henok also approaches DECSI microfinance. After 30 days, he receives a loan of 5,000 birr, which he has to pay back at a 19% annual interest rate. By the end of September, Henok badly needs extra cash to pay the labourers harvesting, threshing, bagging and transporting his sesame. The fastest credit

provider he can find is a spot market trader. The trader lends 8,000 birr, but only when he returns four quintals (400 kg) of sesame to the trader, after harvest. Early November, Henok pays back his loan with four quintals sesame to the trader. On that day, the spot market price is 3,200 birr for one quintal of sesame. Henok repays his loan therefore with 4,800 birr interest over a six-week period. This comes down to an annual interest rate of 365%! During the season, the production costs for four hectares of sesame land have been 22,000 birr, for which Henok borrowed 15,000 birr (2,000 + 5,000 + 8,000). The total amount of interest Henok repaid to his different credit suppliers is 6,150 birr (400 birr for cooperative + 950 birr for MFI + 4,800 birr for IML), i.e. 41% of the borrowed amount.

Henok's story is a typical example of a sesame farmer in northwest Ethiopia. Farmers generally use own capital at the beginning of the season, obtain a small loan from the cooperative, individually or in groups, get a small loan from a micro-finance institution, and make use of informal moneylenders to finish the production season.

Credit sources

Not all producers require credit. Especially small-scale producers realise many field activities with family labour. This diminishes their credit need. In the survey, 16% of the respondents did not access any credit sources and managed to finance all activities with own human and financial resources. On the other hand, close to 10% of the interviewed farmers entirely relied on credit and could not have done anything without external funds. Producers that rely heavily on credit often engage in multiple loans from various credit providers. On average the credit taking producers engage in 1.5 loan agreements (see the table below). Concerning informal moneylenders, it is not rare to see that one producer takes multiple loans.

Formal and informal sources of credit per region (Small-scale farmers up to 30 ha)

The table above shows the overall average picture of credit use by credit taking farmers (up to 30 ha; $n = 340$). It informs about the frequency of the use of different credit sources, the average credit amount per hectare, the share of different credit sources in the credit taken by farmers, the interest to be paid for the borrowed amount and the share of different credit sources in the total credit costs of small-scale farmers.

Microfinance institutions are the most frequently used source of credit for small-scale farmers (53% Amhara, 63% Tigray). MFI's do not reach out to all sesame farmers. The MFI's interest rates (19% per year) are considered fair and also the duration of the loans is considered appropriate (one year). Farmers deplore that MFI's can only satisfy a limited portion of their credit needs (34% and 52% of borrowed funds in Amhara & Tigray respectively). MFI loan reception takes some time with an average lead-time of 25 days. A credit taker has to be registered to get a loan, which is generally a burden for small-scale farmers. Within the limits of the policies of MFI's, it is interesting to observe MFI's consider farmers' cases specifically. Average loan sizes vary between regions with about 8,000 birr per farmer in Amhara and 14,000 birr per farmer in Tigray. Over the years, the loan size may increase when a farmer appears to be a good repaying credit taker.

Primary cooperatives use their own capital to provide limited loans to their members. Only 20% of the small-scale farmers in Amhara and 46% of small-scale farmers in Tigray declare to have accessed loans from primary cooperatives. Although the amounts are relatively small (3% in Amhara and 19% in Tigray), these loans are highly appreciated and are an important reason for farmers to become member of a cooperative. A point of attention is that cooperatives tend to deliver input finance a bit too late, since they receive loans from their unions at a late moment as well. Primary cooperatives cannot access any other source of credit, other than their apex unions. Some financially stronger primary cooperatives use own capital to provide loans for their members. Many cooperatives cannot give such service due to a lack of working capital. Internal capitalisation is thus important for raising the relative importance of this attractive source of credit.

SACCOs are only available in Tsegede *woreda* in Tigray. The experiences of the few SACCOs working with sesame farmers may inspire the further development of this credit option.

Informal moneylenders appear in all kind of forms. For example, a group of governmental employees or friends gather money so that they can give a loan to a sesame farmer. Spot market traders are very important informal moneylenders; they prefer repayment in-kind with bags of sesame. The main strength of informal credit providers is that they are abundant and that money is available in short notice. The loans provided by the informal credit provider are rapidly available with a lead-time between loan request and loan receiving of only seven days on average. Some providers may even supply money at the moment of request already. Informal credit providers provide loans on social ties. Sometimes written agreements are used but these documents do not always depict the practical agreement. The height of the loan is not unlimited, but in most cases informal moneylenders do provide relatively larger loans. Interest rates are very high; on average the interest the farmer has to pay is actually more than the borrowed amount. 'Taking 1,000 birr means repaying 2,000 birr' ("*shi-be-shi*"). It goes without saying that the very high interest rates are a big downturn for producers. They go to informal moneylenders, because there are no other options. Being tied to informal moneylenders as an option of the last resort, strongly affects the marketing options of farmers: they are bound to market their sesame to spot market traders immediately after harvest time. This affects the price they get, and blocks the options to sell through cooperatives and unions or to store sesame and sell later.

Friends and relatives provide loans to sesame producers against various interest rates. Sometimes the rate is 10% per month, where other moneylenders in this category provide loans without interest.

The case of investor farmers

Banks need fixed assets and machinery as collateral, which small-scale farmers cannot provide. Bank loans are only available for investor farmers. The study found that more than 17% of credit taking investors (more than 30 ha) in Amhara and 58%

in Tigray accessed a bank loan. To do so, investor farmers have to be patient: the average lead-time between loan request and approval is 111 days. The Commercial Bank of Ethiopia and the Development Bank of Ethiopia were the most commonly used banks. Loans are acquired for longer periods (3-5 years) at an interest rate of 10% per year. The amount of money that banks provide is about 65% of the credit taken by investor farmers in Amhara and 72% in Tigray. When bank loans do not cover all credit needs of investor farmers, the final stages of the production season may be jeopardised. Loans are used to pay labourers. It has been observed that during harvesting, when cash starts to run short, some investor farmers disappeared because they were unable to pay the labourers. Insufficient monetary funds can therefore also hurt many labourers.

Production investment and potential investment

The production cost survey found that small-scale farmers and investor farmers invest on average 5,500 birr per hectare on sesame production. These investments were made for the 2013 production season whereas in 2014 the production costs for '20 important steps to double yield and improve quality of sesame' of more than 500 model farmers were recorded. It is estimated that small-scale farmers incur about 12,000 birr costs per hectare, when they apply 20-steps agricultural practices. This requires more than a 100% increase of investment on sesame production. Yields should more than double in order to justify this high level of investment. The survey showed low average yields of not more than 4.5 quintals per hectare among small-scale farmers. When 20-steps were applied successfully, an incredible yield of 12 quintals per hectare could be achieved which justifies high investments. What is not taken into account here is the costs that are related to credit. To yield 4.5 quintals on average, currently the credit costs are 808 birr in Amhara and 921 birr in Tigray but it is unknown what the affect is on credit costs when attempting to yield 12 quintals per hectare.

Credit costs

The effective interest to be paid for the loans taken are as follows: Banks (10.5%); MFIs (19%); primary cooperatives (31%), relatives (49%), friends (76%), SACCOs (176%) and informal moneylenders (259%, but for loans lasting about four months). This means that on average, small-scale farmers in Amhara pay 569 birr and in Tigray 385 birr for every 1,000 birr borrowed. Reducing credit costs is thus of prime importance for reducing production costs and improve competitiveness of the Ethiopian sesame sector and to enhance the likelihood of farmers making profit.

The high credit costs are mainly due to the high interest to be paid (in cash or in-kind) to informal moneylenders. They provide 45% and 17% of the credit taken by small-scale farmers in Amhara and Tigray respectively. However, the interest paid to informal moneylenders represents 69% and 39% (Amhara and Tigray resp.) of the total credit costs. It is the other way round for loans taken from MFIs and cooperatives, who respectively represent 34% & 52% (Amhara and Tigray resp.), and 3% & 19% (Amhara and Tigray resp.) of the credit taken by farmers, but the interest paid only represents 11% & 26% (Amhara and Tigray resp.) and 2% & 16% (Amhara and Tigray resp.) of the total credit costs. It is thus very well understandable that farmers are extremely eager to replace credit from informal moneylenders with loans from cooperatives and MFIs!

A remarkable paradox

In Amhara more than 60% and in Tigray more than 25% of the credit is coming from the informal sector. Informal moneylenders finance

especially the last stages of the production season, at very high interest rates, even though a standing, mature sesame field hardly has production risks anymore. The situation is remarkably the opposite for cooperatives and MFIs: they provide loans at the beginning of the production season when risks are high, at relatively low interest rates. This surprising situation leads to a sequence of questions: 'Who is awake and who is sleeping?' Why do informal moneylenders recognise and take advantage of the huge credit needs? And why MFI's and banks do not see these opportunities? And why do financial institutions not develop financial products for financing the last stages of the production season when risks are much lower?

Huge opportunities for formal credit providers

There are thus huge opportunities for formal credit providers to become a more profitable partner in the sesame agribusiness. Based on the findings of the survey, it is estimated that the formal credit system, which now represents 1.1 billion birr, requires an additional capitalisation of 400 million birr (around 19 million euro) in order to be able to replace the informal credit system. But this would not suffice to cost the production of improved agricultural practices. 6 billion birr is needed to at least double the yields. This is an extra 3 billion birr (138 million euro) that currently is not provided by anyone in the sector. The effects of this one-off investment could be spectacular: (i) Farmers' input credit cost reduction with at least 50%; (ii) creating conditions for farmers adopting best agricultural practices leading to productivity improvement (50% yield increase would raise the national sesame revenues with 4 billion birr per year); and (iii) improved presence of cooperatives and unions at the marketing side. Capitalisation of the formal credit sector could thus have a huge pay-off: for banks and MFI's, for farmers and their organisations and for the country at large.

Escaping from the current situation: options for replacing informal credit with formal credit

Sesame producers perceive the policies of banks and MFIs as being too cumbersome. MFIs consider farmers as unreliable partners. The informal sector asks fewer questions and provides credit easily, albeit under rigid (social) conditions and high interest rates. Informal credit suppliers are rarely asking for collateral but they do secure themselves with other methods to reduce repayment default risk. A balance between these extremes should be sought for. Defaulting on repayments has harmed the sesame producers' reputation. This is one of the main reasons why formal financial institutions only provide limited amounts of credit (and why there is a plethora of informal credit providers in the sesame areas). How to break out of this catch 22 situation? Below are some of the major options:

- Making farmers financial literate. Currently there is no good understanding amongst farmers on how they spend their money and how much income and profit they make. Making this visible to them, they can better anticipate on their future expenses and income;
- Strengthening the saving culture of farmers so as to prepare for next year's production costs. Different MFIs and banks could and are willing to provide advisory services for this (for instance Cooperative Bank of Oromia);

- Internal resource mobilisation of cooperatives. Use of cooperative profit to improve own working capital. This requires capacity strengthening of cooperative board members and staff and information services to members.
- Exploring options to provide security to MFI's. Options are: farmers' and cooperatives' saving accounts, alternative options for collateral.
- MFIs loans to cooperatives, which are then responsible for selecting creditworthy members, monitoring of credit use and repayment. This would reduce the transaction costs (both for MFIs and individual farmers).
- Enhancing the reach of MFIs. Mobile agents of banks and use of ICT are options to explore.
- More adapted risk analysis. Providing loans based on evolution of the production season is a modality that should be explored further. Standing crops can provide security to banks; this is important for loans for second weeding and harvesting. Geo-information could be used to monitor the production season and inform banks and MFIs.
- Establishment and strengthening of SACCOs in the sesame areas. Only one *woreda* has SACCOs linked to sesame farmers and this is working well. This practice could be further implemented in other areas.
- Development of inventory credit/warehouse receipt systems. This would be an interesting option for cooperatives engaged in marketing.

Changes in the rural finance system require fundamental institutional change. In the sesame sector of northwest Ethiopia, it is sincerely hoped that current preparations for the innovation the

national rural finance system will lead to policy changes. The SBN stakeholders and the SBN Support Programme are ready to further explain the field level situation to any decision-maker who is interested and to participate to pilot new rural finance modalities, with the aim to find solutions for this most burning issue.

Henok yielded 15 quintals of sesame of which he supplied three quintals to the trader to repay his 8,000 birr loan. He also repaid 2,000 birr in cash to repay the cooperative loan, and he repaid 5,000 birr to microfinance for the loan he had there. For the cooperative and microfinance loans he paid 1,350 birr interest. 12 quintals of sesame were sold for 3,200 birr at the same moment as he repaid the loan. His income is 38,400 birr whilst his costs were 22,000 birr (5,500 birr x 4 hectares). After deducting all the costs he made, he ended up with 10,250 birr that has to support him for the rest of the year. When Henok could have received 8,000 birr loan from his cooperative or local MFI, he would have finished the production season with 13,530 birr. Now that he had to engage in an informal money-lenders loan, he lost more than 3,000 birr potential income, almost a quarter!

Henok: "I am working hard to get rid of loans from the informal moneylenders. When I can access larger loans at the primary cooperative, I may not have to use expensive loans in the future. In the end I want to get rid of taking credit and so I strive every year to save more money to finance the sesame production by my own means. Now I had to bring four quintals of sesame to the trader but when I was able to wait until my cooperative started buying, I could have sold these four quintals for a higher price as well. In addition, when I deliver more quintals to the cooperative, my dividends at the end of the year are also better. Now all the extra benefits end up in the pocket of the trader, who is having a lot of money already".

Credit sources	% of farmers accessing credit		Avg. credit amount per ha (birr)		% of total credit taken		Avg. credit cost per ha (birr)		Avg. annual interest rate (%)	% of credit costs	
	A	T	A	T	A	T	A	T		A	T
Formal credit providers											
Microfinance institutions	53.1%	62.9%	485	1,246	34.1%	52.0%	92	237	19.0%	11.4%	25.7%
Primary co-operatives	20.0%	46.2%	43	462	3.0%	19.2%	13	143	31.0%	1.6%	15.5%
Saving and credit coops.	0.0%	5.2%	0	38	0.0%	1.6%	0	66	173.0%	0.0%	7.2%
Banks	Not applicable for farmers cultivating up to 30 ha.										
Sub-total	73.1%	114.3%	528	1,746	37.1%	72.8%	105	446		13.0%	48.4%
Informal credit providers											
Inf. moneyl. (incl. traders)	34.6%	26.7%	646	416	45.5%	17.3%	558	359	259.0%	69.1%	39.0%
Relatives	19.2%	11.4%	146	172	10.2%	7.2%	72	84	49.0%	8.9%	9.1%
Friends	8.5%	6.2%	96	42	6.8%	1.8%	73	32	76.0%	6.8%	3.5%
Other	0.8%	1.4%	5	21	0.4%	0.9%	0	0	0.0%	0.0%	0.0%
Sub-total	63.1%	45.7%	893	651	62.9%	27.2%	703	475		87.0%	51.6%
Total	136.2%	160.0%	1,421	2,397	100.0%	100.0%	808	921		100.0%	100.0%